

LIGHT ARMOR BATTALION

This chapter describes employment considerations for the light armor battalion supporting a light infantry division. The light armor battalion can deploy as an organic unit, as companies, or platoons task organized to infantry TFs. The battalion may move into a theater as the majority of a light division is deployed. The light armor units may be organized as a TF when a large enemy armor threat exists and/or escalation of hostilities is expected. When the battalion functions as a TF, its basic employment is to counter enemy armor threats until heavier forces arrive in theater.

CONTENTS

	Page
Section I. Organization	6-2
Light Armor Battalion	6-2
Headquarters and Headquarters Company	6-3
Scout and Mortar Platoons	6-3
Section II. Employment	6-4
Missions	6-4
Operational Planning Considerations	6-4
Section III. Command, Control, and Communications	6-5
Leader Groups	6-5
Command and Control Facilities	6-6
Command Post Procedures	6-6
Communications	6-8
Formations	6-10
Section IV. Offensive Operations	6-12
Movement to Contact	6-12
Hasty Attack	6-13
Deliberate Attack	6-14
Exploitation	6-15
Pursuit	6-16
Raid	6-16
Section V. Defensive Operations	6-17
Defend in Sector	6-18
Battle Positions	6-19
Other Defensive Tasks	6-20

CONTENTS (Cont)

Page

Section VI. Other Operations	6-20
Retrograde	6-20
Reconnaissance in force	6-21
Counterreconnaissance	6-21
Passage of Lines	6-24
Relief in Place	6-27

Section I. Organization

LIGHT ARMOR BATTALION

The light armor battalion is organized into four light armor companies and a headquarters company. Figure 6-1 shows the battalion organization.

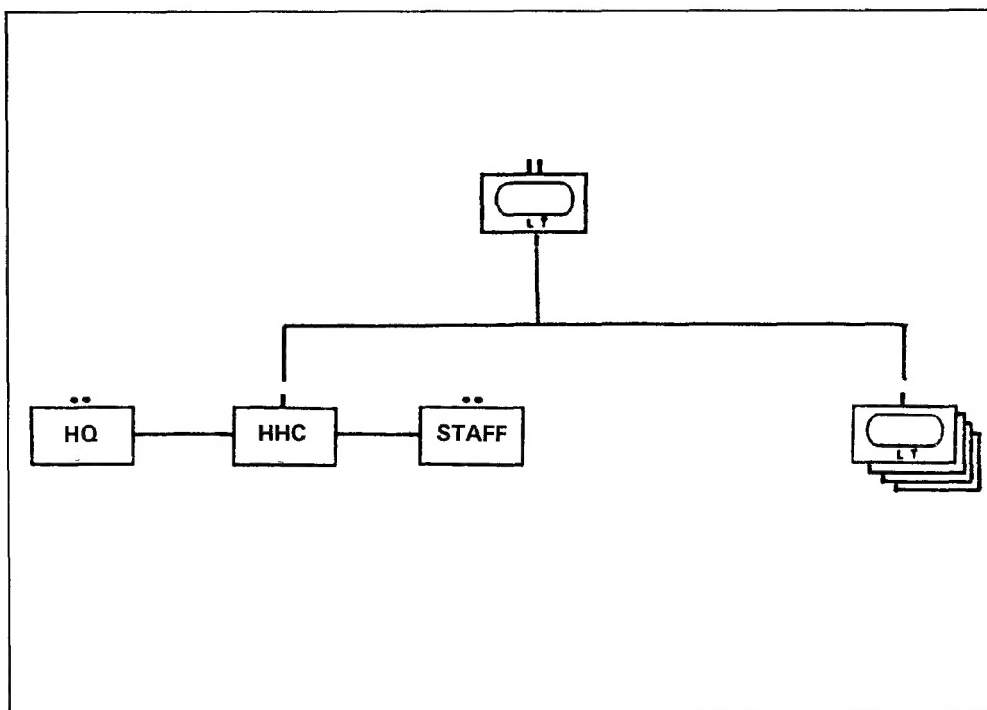


Figure 6-1. Light armor battalion.

HEADQUARTERS AND HEADQUARTERS COMPANY

The headquarters and headquarters company (HHC) in a light armor battalion is organized as shown in Figure 6-2. Unlike the tank battalion, it must support four light armor companies that usually support three different infantry brigades. Many times, the platoons within the companies are supporting nine different infantry battalions within the brigades. Consequently, control of the support assets within the HHC are decentralized; strong leadership, flexibility, and effective planning are necessary to accomplish the support mission.

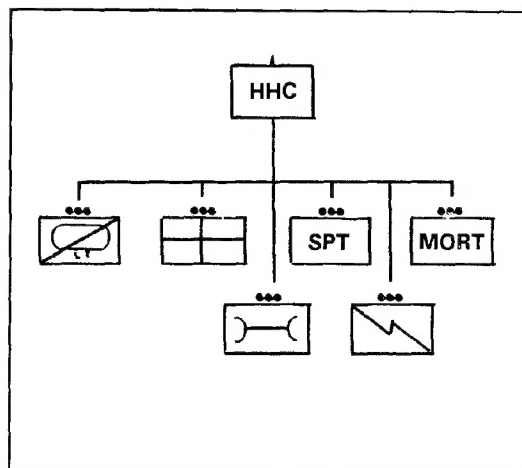


Figure 6-2. Headquarters company.

SCOUT AND MORTAR PLATOONS

The battalion scout platoon performs reconnaissance, provides limited security, and assists in controlling movement of the battalion TF. The scout platoon is one of the commander's primary sources of combat intelligence before the battle and is his eyes and ears during the battle. The platoon is not organized or equipped to conduct independent offensive, defensive, or retrograde operations. It operates as part of the battalion and should be assigned missions that capitalize on its reconnaissance capabilities. The mortar platoon is also organic to the battalion. It has high-angle, relatively short-range area fire weapons, and is well suited for providing close indirect FS. See [Chapter 7](#), and FM 7-90. Figures 6-3 and 6-4 illustrate the organization of the scout platoon and the mortar platoon.

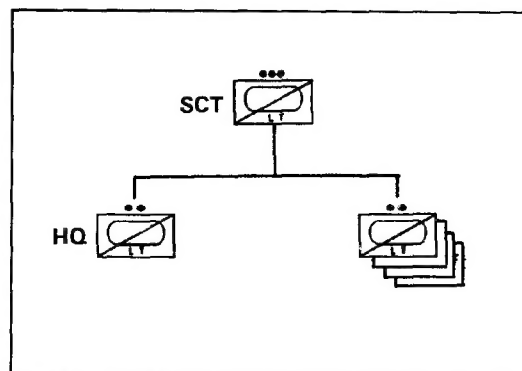


Figure 6-3. Scout platoon.

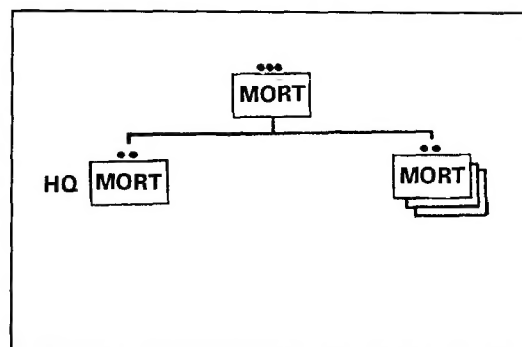


Figure 6-4. Mortar platoon.

Section II. Employment

The light armor battalion can operate as a pure battalion or deploy in echelons as companies and platoons attached to infantry brigades and battalions respectively. If the entire infantry division deploys, part of the battalion may consolidate once in theater. The battalion headquarters then forms the nucleus of a light armor battalion TF.

The light armor battalion provides the LID commander with the following:

- A highly mobile, protected potent ground combat force.
- Shock effect.
- Effective antiarmor capability.
- Bunker- and building-busting capability and direct, close-in FS for dismounted infantry.

The light armor battalion may conduct operations as a battalion TF under the following conditions:

- The enemy has a considerable mechanized or armor force.
- A contingency mission has matured to a level in which the entire LID has deployed to include the light armor battalion.
- Terrain favors the use of a larger maneuver force and/or supports long-range fires.

MISSIONS

The light armor battalion can expect to execute the following missions:

Attack. The battalion provides the infantry division commander with his most maneuverable, survivable, and potent ground force on the battlefield. He may use this capability either to lead the division to fix the enemy force or as his maneuver force. Keep in mind the battalion's speed in relation to the speed of the predominantly dismounted force. The division commander can use this to his advantage by buying time to maneuver his infantry units. Infantry moving with the light armor TF must be mobile. Truck transportation assets are available in the TF, however, if more than one company requires transportation, trucks must come from corps support.

Defend. In open terrain, the battalion is most effective when operating as a total unit. In closed terrain, better suited for light infantry, the battalion is most effective operating alongside the infantry as platoons and companies OPCON to the infantry battalions and brigades defending in depth.

Screen/Guard. The division commander may give the light armor battalion deployment priority if the enemy threat is predominantly mechanized or is in wide-open terrain allowing long-range fires. The battalion in this circumstance may be tasked to establish a screening force to provide security for the division as it flows into the AO. As the division builds in theater, the battalion's screening mission may end, and the companies and platoons within the battalion may augment the infantry brigades once again. In a major force buildup involving the arrival of cavalry, armored, or mechanized forces, the battalion may be relieved.

OPERATIONAL PLANNING CONSIDERATIONS

Intelligence. The battalion scout platoon offers a reconnaissance force for both the battalion and division. Ground surveillance radar (GSR) may be attached from the division's military intelligence (MI) battalion. The battalion relies on the division's intelligence assets for intelligence beyond their own ability to collect.

Maneuver. These planning considerations apply:

- The attachment of dismounted infantry companies to the light armor battalion will require external transportation support from corps.
- The light armor battalion relies on the attachment of light infantry for close-in security in closed terrain.
- The light armor battalion's ground mobility is its greatest asset, the battalion can move faster than any other divisional ground combat element.

Fire Support. The battalion FSO is not equipped with an armored vehicle but must be positioned to maintain communications with subordinate FISTs, the battalion FSE (usually located with the TOC), and supporting FS assets. Positioning is based on METT-T; one solution is to position the battalion FSO in the battalion TAC CP.

The high mobility of the light armor battalion, when compared with the remainder of the divisional combat power, may require additional fire support assets that can be positioned in direct support of the light armored battalion.

The use of submunitions may be affected by their potential for nonexploded ordnance (UXO), and as a hazard to friendly light forces.

Air Defense. The battalion requires air defense augmentation. Light armor's presence in a predominantly dismounted AO makes it easily identifiable from the air and a high-value target for enemy attack aircraft. Smoke blankets defeat enemy aircraft targeting and increases the survival of the light armor battalion.

Mobility and Survivability. The light armor TF will normally have at least one company of corps engineers in its task organization. The engineer company will have the capability to provide a full range of mobility, countermobility, and survivability tasks, to include assault gap crossing, complex obstacle breaching, preparation of fighting positions, emplacement of conventional and dynamic minefield, and construction of nonexplosive obstacles. Leaders must know the location of NBC hazards to reduce the vulnerability and risk level of the light armor battalion.

Combat Service Support. The battalion does not require transportation augmentation if it deploys in its entirety. Additional corps maintenance support may be required as described in [Chapter 8](#).

Command and Control. The light armor battalion should provide a liaison to the division headquarters for staff coordination to enhance C2.

Section III. Command, Control, and Communications

LEADER GROUPS

Several types of leader groups work closely with the commander to provide effective C2. The commander determines who he wants in each group and establishes a standing list as part of his SOP.

Command Group. The command group consists of the commander and those he selects to go forward to assist him in controlling maneuver and fires during the battle. It normally includes the FSO, forward air controller, FAC, and S3. There is no requirement for these people to collocate. For example, the commander may be in one part of the battalion sector while the S3 works in a separate part of the sector. The composition, nature, and tasks of the command group are determined by the commander to permit the optimum C2 of his unit during the battle.

Leaders Reconnaissance Group. The leaders reconnaissance group is a standard list of personnel who accompany the commander on his reconnaissance during troop-leading procedures. It usually includes the command group, the company commanders, and key attachment leaders (such as the ADA officer and engineer).

Orders Group. The orders group is a standard list of personnel the commander wants present when he issues orders or that serves as a distribution list for orders. It usually consists of the leaders reconnaissance group, the XO, S1, S2, S4, battalion chemical officer, smoke/decontamination platoon leader, scout platoon leader, and mortar platoon leader.

COMMAND AND CONTROL FACILITIES

Tactical Command Post. A TAC CP may be formed during fast-moving offensive or retrograde operations to maintain communications and facilitate the movement of the main CP. In each circumstance the commander may designate one of the CP vehicles from the main CP to act as the TAC CP. Some or all of the command group may locate at the TAC CP at various times.

In some circumstances, the TAC CP may be part of an opposed-entry airborne assault. It is then referred to as the assault CP. The assault CP vehicle is usually a HMMWV with the minimum communications equipment and mapboards needed to control the unit. However, the assault CP may merely be the command group and enough man-packed communications equipment to control the light armor units deployed in the initial assault until follow-on operations deliver the TAC CP vehicles.

Main Command Post. The TF main CP is the control, coordination, and communications center for combat operations. The main CP is composed of the S2 and S3 sections, the FSE, representatives from other attached elements, and the TAC CP (when not forward). There must be as few main CP vehicles and personnel as possible to allow for rapid displacement, but the main CP must be large enough to accomplish C2 functions in support of the commander.

Combat Trains Command Post (CTCP). The CTCP is the coordination center for CSS for the TF and the control element of the combat trains. It is positioned forward of the field trains. The S4 is responsible for operations, movement, and security of the combat trains, assisted by the S1. The S4, S1, and battalion maintenance officer (BMO) must continually assess the situation, anticipate the needs of units, and prepare to push support forward. Anticipating requirements is the key to successful CSS.

The CTCP is the alternate main CP. It must be prepared to assume the functions of the main CP at any time. It monitors the TF command net and maintains charts and tactical situation maps identical to those at the main CP. The CTCP routinely operates a switchboard for elements in the combat trains; it is the NCS for the battalion A/L net and operates in the brigade A/L net.

COMMAND POST PROCEDURES

Staff Journal. Each CP cell should maintain a staff journal. The soldiers on duty in the cell maintain the journal on DA Form 1594. They record important events, such as—

- Command decisions.
- Movements of units.

- Changes in unit status.
- Liaison activities.
- Receipt of new or amended orders.
- Visits of commanders and staff officers from other headquarters.

The on-duty soldier logs each action he took in response to an event. He may use abbreviations or symbols. When he is preparing to go off shift, he makes special notations of events requiring action by soldiers on the next shift.

Staff officers and NCOs use the staff journal as a record for review by incoming duty personnel. It ensures continuity between shifts in a CP in that personnel on the incoming shift know which staff actions need further work. It provides a ready reference for the commander and staff to review current orders. The journal also serves as a permanent record for after-action reports, operational reviews, and historical research.

Map Boards. All map boards should be capable of being mounted inside the CP vehicle. Several other techniques are available for constructing map boards. They should be made of material thick enough to withstand periodic dismounting and mounting. They should also be constructed so that the maps can be quickly and easily changed. Overlays should be manufactured to a standard size, with holes to fit standard mounting hooks (referred to as “standard drops”). Staffs should ensure that no map board has so many overlays that it is no longer understandable or that its main purpose is lost. Maps commonly used in the CP include the following:

- **Situational map.** The situational map is maintained by the S3. It illustrates, through the use of military graphic symbology, the friendly array of combat, CS, and CSS assets as well as the maneuver plan overlay. Unit SOP will dictate which specific graphics will be placed on which overlays.
- **Intelligence map.** The intelligence map is maintained by the S2. It illustrates disposition through the use of military graphic symbology all enemy forces to include combat elements, obstacles, and fortifications.
- **Fire support map.** The FS map is maintained by the battalion FSE and is used in the planning and coordination of FS, target acquisition, and clearance of indirect fires. The FS map is used with the S2’s intelligence map to develop high payoff targets and ensure detection and attack assets can be committed against those targets.

Information Charts. Standard information charts are used to effectively maintain and organize essential information. Staff officers display critical information so that they can view or update it while looking at the map. Staffs should only post information that they will reference often or that is vitally important. Information charts on map boards should not be a replacement for critical information charts kept in the staff workbook.

Orders Preparation, Reproduction, and Dissemination. CP SOPs should contain procedures for preparation, reproduction, and dissemination of overlays and written orders.

Possible topics include–

- Who draws overlays and graphic control measures.
- Who approves overlays.

- Standardized fall-in-the-blank forms for orders.
- Who writes FRAGOs and OPORDs.
- Who is responsible for providing data for each paragraph.
- Who is responsible for the reproduction of overlays.
- How overlays are reproduced (computer or mechanical means or by hand); if by hand, who assists in copying overlays and where copying is done.
- How many copies of overlays and orders are made (providing multiple copies to each subordinate saves the subordinate time).
- How orders are distributed.

COMMUNICATIONS

Battalion TF communications are sent over a variety of radio nets. [Figure 6-5](#) illustrates battalion radio nets.

Primary battalion communications nets are—

- Command net. A secure command net is used for C2 of the TF. All organic and attached units, including the FSO, FAC, and leaders of supporting elements, operate on the TF command net. During the execution of the mission, only commanders transmit; all others monitor and transmit only essential information. The command net is controlled by the TF CP.
- Operational and intelligence (OI) net. This OI net is a secure net established to provide a mechanism for the battalion TF to accept routine reporting of information concerning OI matters and without cluttering or interfering with the battalion command net.
- Administrative/logistics (A/L) net. The A/L net is a tactical net, that is controlled by the combat trains CP and used to communicate the A/L requirements of the TF. All organic and attached units normally operate in this net.
- Special radio nets. These include the following:
 - The scout platoon net or a designated frequency may function as a surveillance net when required. The S2 and elements assigned surveillance missions operate on this net. Other elements enter or leave the net to pass information as required.
 - The TF FSE and company FIST operate in the supporting field artillery command fire direction net and a designated fire direction net to coordinate field artillery fires for the battalion. The tactical air control party (TACP) operates in USAF tactical air-request and air-ground nets to control air strikes.
 - Supporting air defense units monitor the early warning net. In the absence of collocated air defense support, the main CP will also monitor the division early warning net.
 - OPCON or attached support assets may operate in their parent unit nets, but they must also monitor the command net at all times.

	TF CMD	TF O&I	TF A/L	OTHER
CDR	P	-	E	P - DIV CMD
XO	P	-	P	
S3	P	M	-	M - DIV CMD
MAIN CP (S3)	NCS	-	M	P - DIV CMD
MAIN CP (S2)	M	NCS	-	P - DIV O&I
COMBAT TRAINS CP	M	-	NCS	P - DIV A/L
SIGNAL OFFICER	M	E	M	E - AS REQUIRED
FSO	M	-	-	M - TF FD, FS NETs
FAC	M	E	-	P - AIR FORCE NETs
S1	-	-	M	
S4	M	-	P	E - AS REQUIRED
BMO	M	-	P	
SPT PLT	M	-	P	
MED PLT	-	-	P	
CO/TM CDRs	P	E	-	P - CO/TM CMD
CO/TM XO _s	M	-	E	P - CO/TM CMD
CO/TM 1SG	-	-	P	P - CO/TM CMD
ENGR CO	M	E	E	P - ENGR CO
SCOUT PLT	P	P	E	P - SCOUT PLT
ADA PLT	M	E	E	P - ADA PLT; EW
MORTAR PLT	M	-	E	NCS - TF FD NET
GSR	M	P	E	
HHC CDR	-	-	P	P - DIV A/L
LO	M	E	-	M - AS ASSIGNED

NCS - NET CONTROL STATION FOR NET

P - PRIMARY USERS - MONITOR AND TRANSMIT

M - MONITOR NET, TRANSMIT AS REQUIRED

E - ENTER NET TO TRANSMIT MESSAGE, THEN RETURN TO PRIMARY NET

Figure 6-5. Battalion radio nets.

FORMATIONS

The light armor TF may move in any of the basic formations. It may use more than one formation in a given movement if the terrain changes. Light infantry should be mounted on trucks (if available) or on follow-on company team vehicles if speed is important or the move is long. Other factors such as distance between units are dependent on METT-T. Figures 6-6 through 6-8 are examples of light armor TF formations.

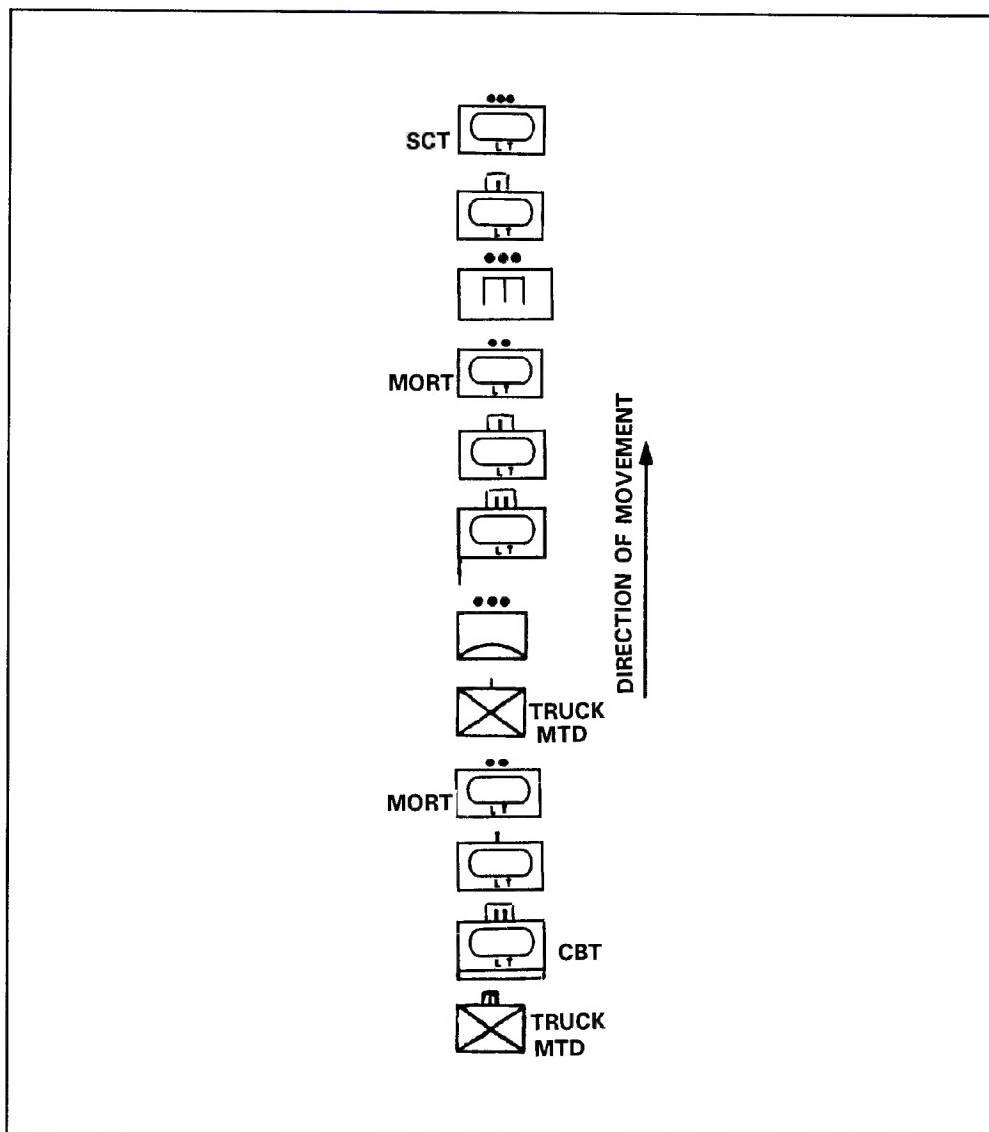


Figure 6-6. Task force column.

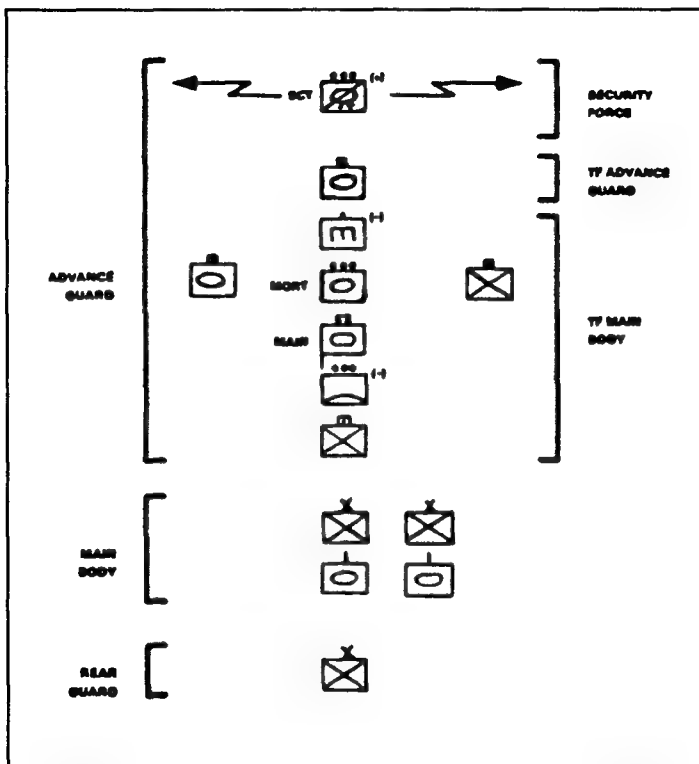
The diagram illustrates a communication system layout. On the left, a 'SCT' (Sender) unit is connected to a 'MORT' (Receiver) unit via a lightning bolt symbol. On the right, a 'MORT' unit is connected to a 'SCT' unit via a lightning bolt symbol. A central vertical column contains several components: a 'CBT' (Control Unit) at the bottom, followed by a series of signal processing units (represented by various geometric shapes like rectangles with internal lines or dots). A 'MOVEMENT' arrow points upwards, indicating the direction of signal flow from the bottom towards the top of the central column.

6-11

Section IV. Offensive Operations

MOVEMENT TO CONTACT

The battalion TF conducts a movement to contact to make or regain contact with the enemy and to develop the situation. The battalion TF could be given a movement to contact mission as the lead element of a brigade or division attack, or as a counterattack element (see Figure 6-9). Movement to contact terminates with the occupation of an assigned objective or when enemy resistance requires the battalion to deploy and conduct an attack to continue forward movement.



Planning Considerations. Key planning considerations for a movement to contact unique to a light armor battalion are—

- Speed required by the division. The rate of march of the light armor battalion can easily exceed the rate of march of the other infantry TFs.
- Available avenues of approach. The light armor battalion should move along an axis of advance that maximizes its firepower and maneuverability.
- Requirements to maintain mutual support and synchronization between maneuver units, security, and FS.

Task Organization. The TF is organized with a security force, advance guard, main body, and flank and rear guards.

Figure 6-9. Light armor task force movement to contact as lead for a division attack.

The following considerations apply:

- The security force is normally established with the light armor battalion scout platoon which is equipped with HMMWVs. The scout platoon may be augmented with TOW-equipped HMMWVs (task organized from an infantry brigade) or M8s to provide long-range antitank capability in the security force. Planners must consider trafficability of the terrain since the wheeled scouts are not as maneuverable as the tracked M8s.
- The advance guard is usually a company team. Company teams are task organized, with light armor and infantry platoons forming a mutually supporting team. Attached infantry may move with the company team by a variety of means. The infantry may move dismounted, mounted on top of the M8s, or mounted in trucks until contact is made or the situation requires the infantry to dismount.

- The company team may be augmented with TOW HMMWVs from the infantry battalions if long-range antitank overwatch is desired. Other attachments may include an engineer platoon or squad (HMMWV-equipped) and an ADA section. See [Chapter 5](#) for additional information on company team operations.
- The main body remains behind the advance guard lead element, keying its movement to that of the advance guard. It is flexible enough to maneuver rapidly and provide responsive support when committed. The main body contains the bulk of the TF's combat force; it may be augmented with additional assets including TOW HMMWVs from the infantry battalions' antitank platoons, engineers, ADA sections, and GSR. Infantry in the main body moves in trucks if possible.
- Flank security is normally accomplished with platoon-size elements (under company control) from one or more of the companies in the main body. The flank guard in a light environment may be HMMWV-equipped elements from the battalion's scout platoon or attached antitank platoons.
- The trailing company of the main body provides a rear guard to protect the TF's rear.
- CSS assets move with the TF as part of the combat trains or field trains. Further discussion of CSS support can be found in [Chapter 8](#).

HASTY ATTACK

The hasty attack is conducted either as a result of a meeting engagement or when a bypass has not been authorized and the enemy force is in a vulnerable position. Hasty attacks are initiated and controlled with FRAGOs and are usually indicated when a movement to contact results in enemy contact. Figure 6-10 shows a light armor hasty attack.

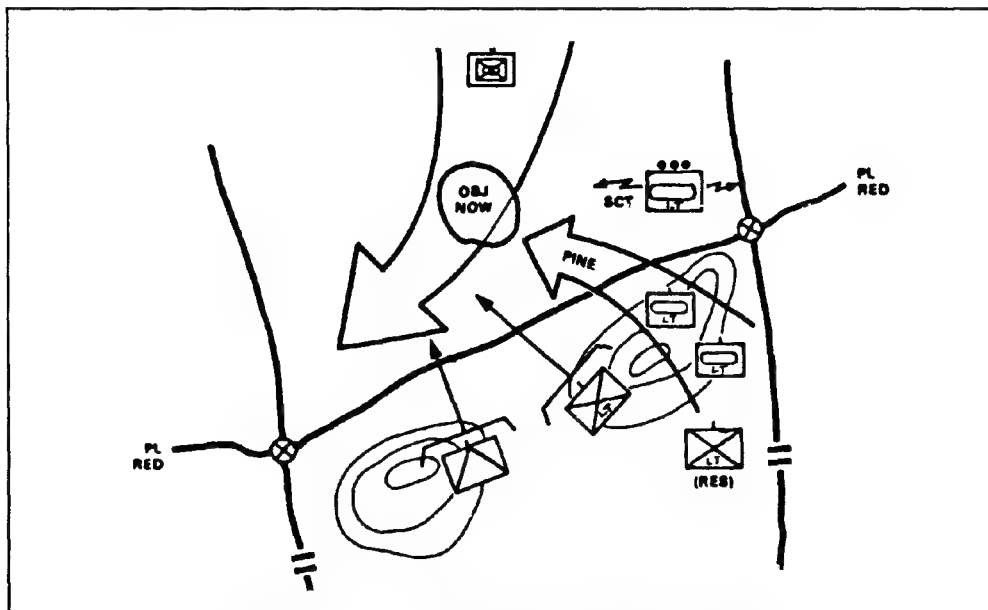


Figure 6-10. Light armor task force in a hasty attack.

Hasty attacks at the TF level are conducted as described in FM 71-2, with the following planning considerations:

- Commanders must carefully consider where and when to dismount the infantry to maximize its effectiveness. The infantry should be transported as close to the battle as possible before dismounting, taking security into consideration. M8s cannot fight with infantry riding on top of them; however, M8s are vulnerable to enemy dismounted forces if they outrun their own supporting infantry. Light armor is most effective when working as a team with its light infantry. That team must be preserved during maneuver.
- Antitank-equipped HMMWVs are best deployed in overwatch. During hasty attacks, the maneuverability and survivability of the M8s should be maximized with the less maneuverable and survivable TOW HMMWVs in overwatch.

DELIBERATE ATTACK

TF deliberate attacks differ from the hasty attack in that they are characterized by precise planning based on detailed information, thorough preparation, and rehearsals. Deliberate attacks normally include large volumes of supporting fires, main and supporting attacks, and deception measures.

A light armor battalion TF will usually be the division's main attack element against an enemy force consisting of mechanized forces. Figures 6-11 and 6-12 illustrate light armor deliberate attacks in breaching and assault operations.

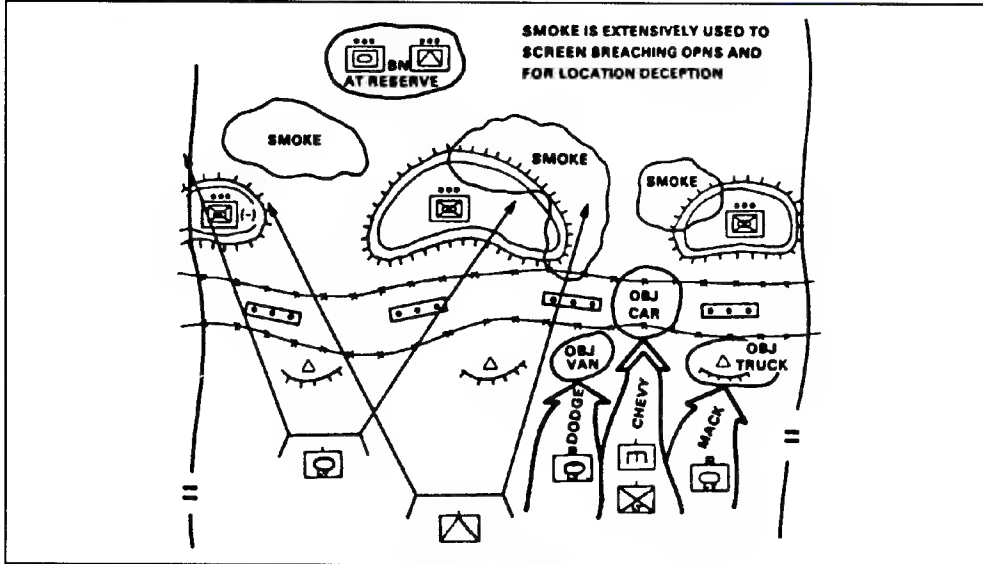


Figure 6-11. Light armor task force deliberate attack (breach).

Planners should consider the following factors:

- The timing of the attack must be synchronized with the other elements of the division. The rest of the division may be moving dismounted or truck-mounted and planners must consider the rate of movement based on terrain and weather.
- The division possesses limited mechanical obstacle breaching systems. The breaching of obstacles will in most cases be conducted manually with dismounted engineers or with the aid of light dozers or SEEs, requiring suppression from M8s and smoke for protection and concealment. Obstacle breaching therefore requires extensive planning and rehearsals.
- The division's organic artillery consists of towed 105-mm howitzers and may be augmented with corps-level towed 155-mm howitzers if force buildup has matured to the level in which corps systems have entered the theater. Light forces also rely on CAS and naval gunfire (NGF) for FS.

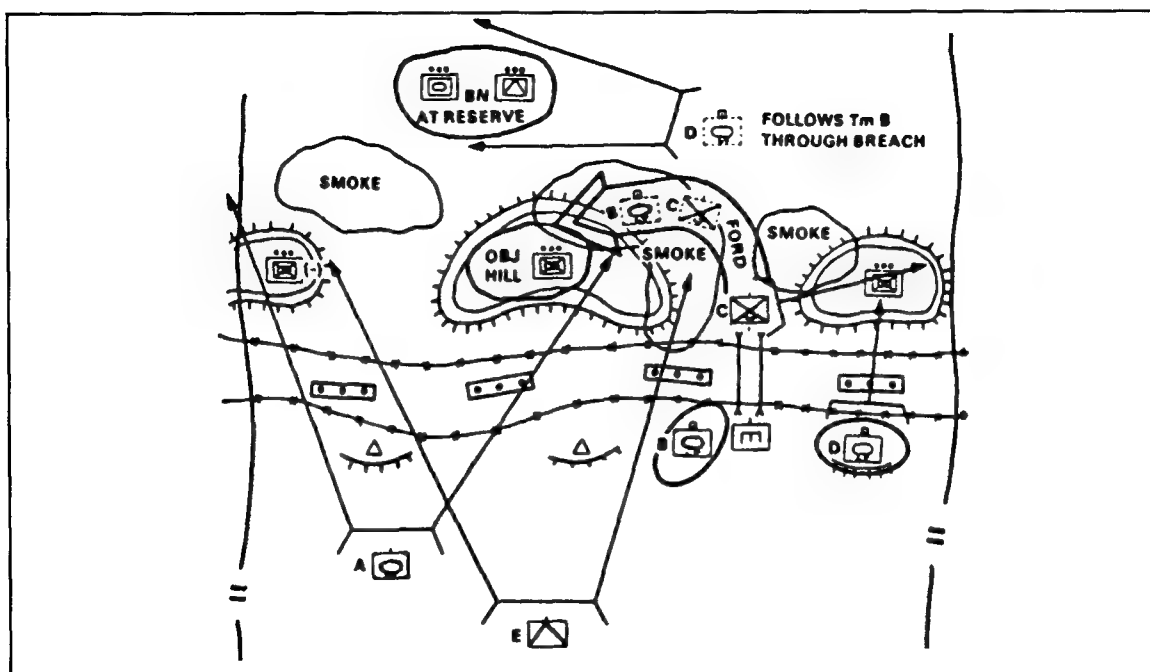


Figure 6-12. Light armor task force deliberate attack (assault).

EXPLOITATION

The exploitation is conducted to take advantage of success. It prevents the enemy from reconstituting an organized defense or conducting an orderly withdrawal. It may follow any successful attack. The keys to successful exploitation are speed in execution and pressure on the enemy. Exploitations are usually oriented on a terrain objective containing enemy's reserves, CS, CSS, and C2 facilities.

The light armor battalion is the light division commander's exploitation force. It is the most mobile ground element and can regain and maintain contact with the withdrawing enemy force. Planners must prepare for support during exploitation, with considerations for refueling and rearming. Air resupply may be used to support the force during exploitation.

PURSUIT

The pursuit normally follows a successful exploitation. It differs from an exploitation in that a pursuit is oriented primarily on the enemy force rather than on terrain objectives. While a terrain objective may be designated, the enemy force is the primary objective. The purpose of the pursuit is to overrun the enemy and destroy him.

If the enemy is predominantly dismounted, the division commander will probably use his infantry in the pursuit. The light armor TF may be designated as the division reserve during the pursuit of a dismounted enemy force; it may become the main effort if the fleeing enemy is mounted.

RAID

A raid is an attack into enemy territory to accomplish a specific purpose, with no intention of gaining or holding terrain. Raids may be conducted to—

- Capture prisoners.
- Capture or destroy specific enemy material.
- Destroy logistical installations.
- Obtain information concerning enemy locations, dispositions, strength, intentions, or methods of operation.
- Disrupt enemy plans.

The light armor TF may conduct, or direct subordinate elements to conduct a raid. Raids may be conducted mounted or dismounted. A mounted raid is normally conducted as an exploitation with a limit of advance or as an attack with a limited-depth objective.

Raids may be conducted in daylight or darkness, within or beyond supporting distance of the parent unit. When the area to be raided is beyond supporting distance of friendly lines, the raiding party operates as a separate force. Raiding force security is vital because the raiding party is vulnerable to attack from all directions. Raids should be timed so that the raiding force arrives at the objective area at dawn, twilight, or other times of low visibility. FS, if in range, should be planned.

During movement in daylight, the raiding force uses covered and concealed routes of approach. During reduced visibility, advance and flank security detachments precede the raiding force. They prevent premature discovery of the raid by locating enemy security detachments and directing the raiding party around them.

The withdrawal is usually made over a different route from the approach. Security detachments are employed to ensure that the routes of withdrawal are open. Protective fires are planned along the axes of advance and withdrawal. Rally points are planned for units to assemble after they have completed the mission and are ready to withdraw.

Planning considerations for raids include the type and number of vehicles and weapons that the raiding force will have, movement distance, length of time the raiding party will operate in enemy territory, and expected enemy resistance. The raiding force usually carries everything required to sustain itself during the operation. Resupply of the raiding force, if required, is by aircraft. [Figure 6-13](#) illustrates a raid with light armor.

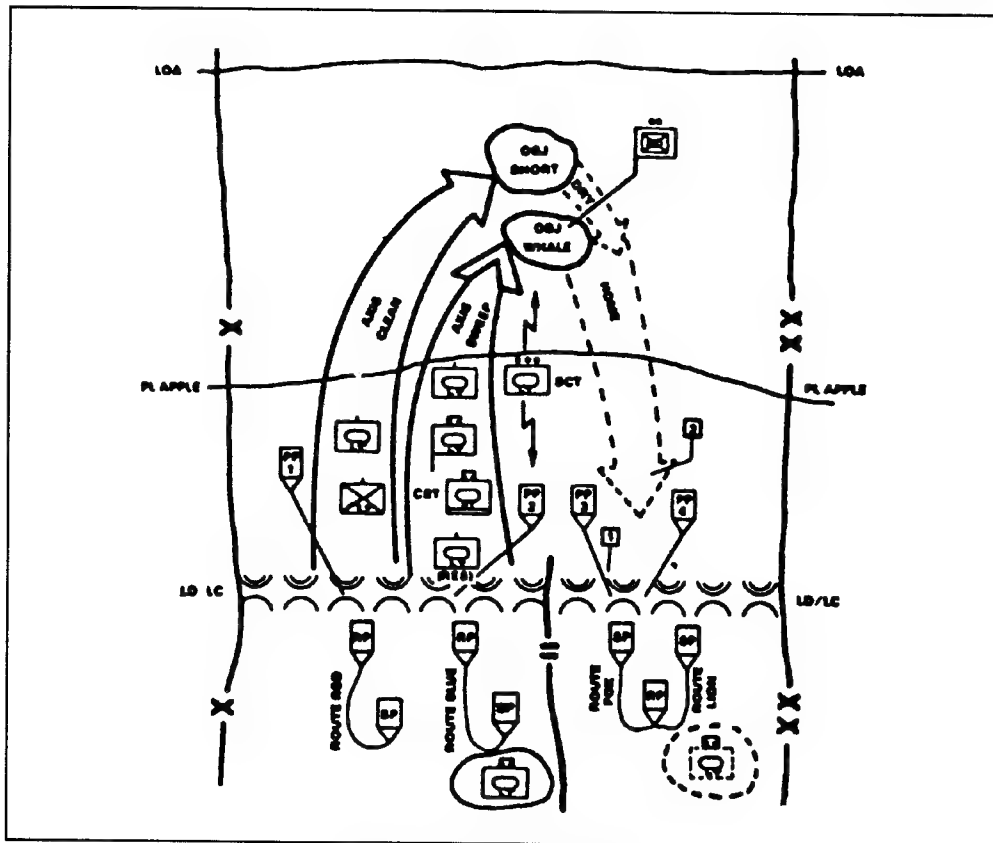


Figure 6-13. Raid with light armor.

Section V. Defensive Operations

The light armor battalion conducts defensive operations as part of a LID defense. It can be integrated into the defense in the following ways:

- As the division's reserve or counterattack force.
- Defending in sector from BPs.
- Task organized with companies supporting each infantry brigade, and a reserve force under the control of the light armor battalion headquarters.
- As a security force.

The light armor TF defends in sectors or BPs or using a combination of both. [Figure 6-14](#) summarizes the factors to consider when selecting BP or sector defense.

FACTOR	BATTLE POSITION	SECTOR
Avenues of approach	Well defined; enemy can be canalized	Multiple avenues prohibit concentration
Terrain	Dominates avenues of approach	Dominating terrain not available
Area of operations	Narrow	Wide
Mutual support between companies	Achievable	Cannot be achieved
Higher commander's ability to control	Good	Degraded

Figure 6-14. Factors in battle position and sector defenses.

DEFEND IN SECTOR

METT-T may cause the division commander to deploy the battalion in a sector in which he expects enemy mechanized or armored forces to attack. Light armor company teams construct battle positions and defend in depth. Light infantry deploys in surrounding terrain that favors dismounted attacks and facilitates supporting fires. Figure 6-15 shows a defense in sector.

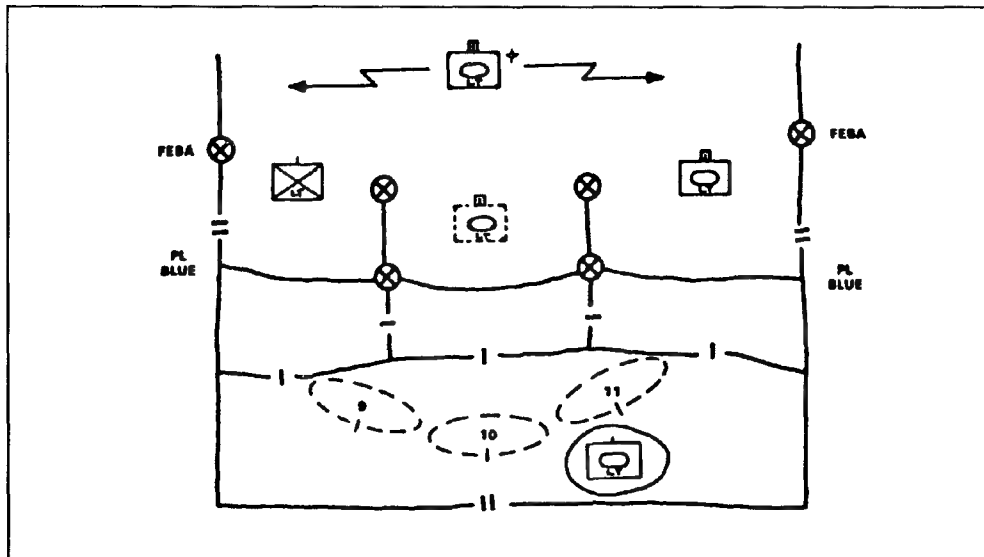


Figure 6-15. Battalion defending in sector.

BATTLE POSITIONS

A BP is a general location and orientation of forces on the ground from which units defend. The BP can be used for units from battalion- to platoon-size. Light armor units defend BPs in the same way armored units do. The difference is that the light armor battalion will not normally operate in terrain that allows it to defend a battalion size BP. The BP defense for light armor units will usually consist of company BPs controlled by the TF. Security forces may operate forward and to the flanks of BPs for early detection of the enemy. Figure 6-16 shows a BP defense.

Units can maneuver in and outside of the BP as necessary to adjust fires or to seize opportunities for offensive action in compliance with the commander's intent. The commander may freely move his force within the assigned BP. The commander must notify the higher commander and coordinate with adjacent commanders when maneuvering his force outside the BP.

The TF commander allocates space to the subordinate elements within the general area. The TF commander-

- Selects subordinate BPs by considering space two levels down (platoon level). He provides sufficient space in each BP to allow for dispersed primary and alternate positions. Room for operations in limited visibility, supplementary hide positions, and locations for combat trains are also considered.
- Varies the degree of maneuver of teams by allocating larger company BPs. BPs may also be placed in depth.

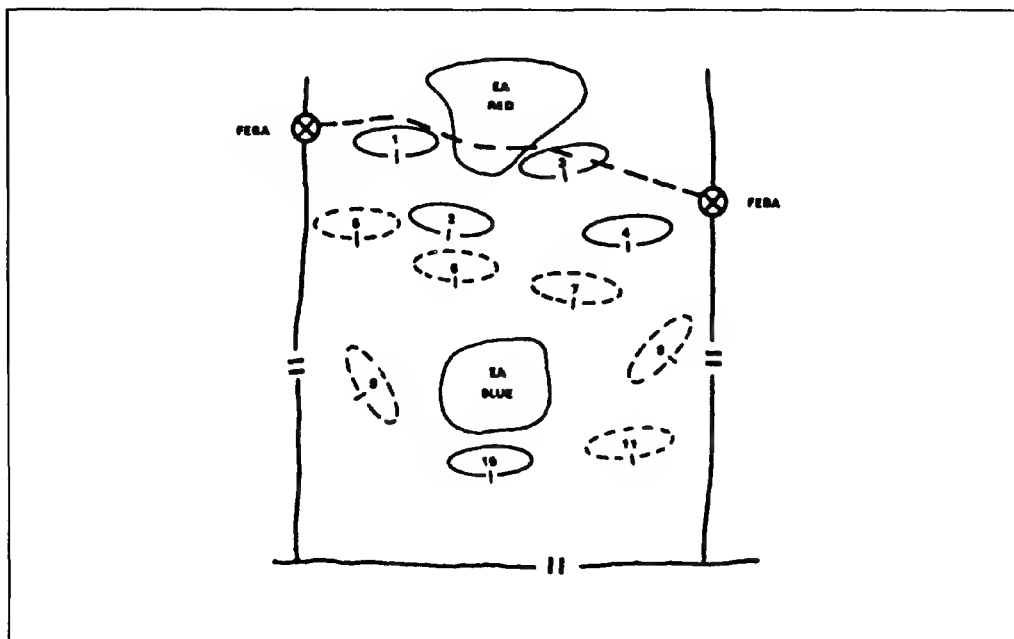


Figure 6-16. Battle position defense.

OTHER DEFENSIVE TASKS

Reserve. In some cases, each infantry brigade may be task organized with a light armor company to strengthen the brigade defense. Platoons within the companies may be further attached to infantry battalions. [Chapter 4](#) discusses how a platoon would fight as part of a battalion TF. [Chapter 5](#) discusses how a company would support a brigade. In these cases, the battalion headquarters may become the controlling headquarters for the division reserve consisting of at least one light armor company and other divisional combat forces. This option provides the division commander with a responsive, flexible, potent maneuver force that he can use anywhere in the area of operations. The division can commit the reserve during the battle to spoil the enemy's attack, destroy him, or reinforce success and gain the initiative.

Rear Operations. The battalion can provide rear area security for the division. Force buildup may mature to a point in which heavy armor or mechanized follow-on forces enter the theater and assume responsibility for the area of operations once covered by the light infantry division. The division may then assume a corps reserve role, or prepare for future offensive operations. Within the division, the light armor battalion may be tasked to react to rear area threats. The battalion executes this mission similar to a counterattack mission in reaction to forces inserted into the rear area.

Attacks From a Defensive Posture. Attacks from a defensive posture include counter-attack and spoiling attacks as part of either hasty or deliberate operations. The light armor battalion is an ideal force for the division commander to use for this mission. The following considerations apply:

- **Counterattack.** Light infantry defensive operations against a mechanized or armored threat employ defensive positions in depth, coupled with EAs to reduce and then destroy the enemy force as it moves through the AO. The infantry is basically fixed in position once deployed into a defense. The light armor battalion provides a mobile force that can move throughout the defensive sector and counterattack to defeat the enemy force at the decisive place and time. The counterattack is usually a key element in a coordinated effort to mass fires-CAS, attack aviation, artillery, and other fires-into a designated EA. Light armor TFs attack by fire or by fire and movement.
- **Spoiling attack.** The spoiling attack strikes the enemy when he is most vulnerable during preparations for attack in AAs or attack positions or on the move before crossing his LD. The objective of the spoiling attack is the enemy force, not terrain. The reserve is often used in a spoiling attack to allow forward units to concentrate on defensive preparations.

Section VI. Other Operations

RETROGRADE

Retrograde operations consist of three missions: delay, withdrawal, and retirement. Light armor units execute these missions in the same manner as armored units. See [Chapter 4](#) for a more detailed explanation.

The light armor TF provides the LID with the only asset capable of delaying against a mounted threat. The light armor TF is also well suited to act as the security force or DLIC when withdrawing either under enemy pressure or not under enemy pressure.

RECONNAISSANCE IN FORCE

A reconnaissance in force is a deliberate attack to discover and test enemy disposition, composition, and strength. It is ordered by a division or higher commander.

Light divisions will usually face a light enemy force. In most cases, light infantry is best suited to finding and testing a similar enemy force. The stealth with which light infantry moves is an advantage when conducting any reconnaissance.

A reconnaissance in force mission could lead to a general engagement under unfavorable conditions that will commit the force executing the mission. Light infantry can be extricated more easily than a light armor battalion; therefore, commanders must weigh the advantages and disadvantages of using the light armor battalion as the reconnaissance in force unit. The light armor battalion may be given the mission of reconnaissance in force if the division commander desires a highly maneuverable force to find and test an enemy that may consist of armored or mechanized vehicles.

COUNTERRECONNAISSANCE

Counterreconnaissance is defined as the sum of the actions taken at all echelons throughout the depth of the area of operations to counter enemy reconnaissance efforts. Counterreconnaissance is both active and passive; it includes all combat actions designed to deny the enemy information about friendly units by detecting, fixing, and destroying enemy reconnaissance elements (active measures) and by concealing friendly information through OPSEC (passive measures, see [pages 2-22](#) through [2-24](#)). An analysis of battles throughout history shows the initial stages of battle are mainly a fight for information. Both sides try to learn as much as possible about each other without committing their main effort or disclosing their primary positions. The force that wins the battle for information has a major advantage in the following battle.

Planning and Preparation. Counterreconnaissance is one aspect of security. The counterreconnaissance force commander is given specific tasks, such as “destroy” or “deny,” rather than the general task “conduct counterreconnaissance.” Even though the focus of the following discussion is in the defensive forward security zone, counterreconnaissance continues throughout all offensive and defensive operations. It is more than just a forward or flank security mission. All maneuver units must also plan to counter enemy reconnaissance elements that try to penetrate their area of operation. All elements, including CPs, CS, and CSS units, must establish local security and use hide positions. In the defense, OPs with an ambush ability should cover obstacles, gaps between units, and avenues of approach. These efforts are coordinated through the S2/S3 to ensure full coverage and to avoid friendly force engagements. The S2 consolidates all counterreconnaissance efforts into the battalion R&S plan. In the security area, a detailed IPB discloses likely enemy reconnaissance actions, such as the most likely avenues of approach for mounted and dismounted enemy reconnaissance elements.

Unity of command is vital for the forces in the security area. For example, the commander of a light armor company conducting a screen or guard mission for the battalion should have control of all forces in the security zone, including scouts, GSRs, ADA assets, light infantry, engineers, mortars, and Army aviation. The commander receives a detailed order that specifies expected enemy reconnaissance measures and the actions required to

counteract them. The S2 recommends to the S3 the placement of the force for final approval by the commander. Additionally, the battalion TF commander and staff should—

- Develop NAIs and assign responsibilities for observation.
- Determine the limit of enemy advance (to prevent enemy observation of friendly positions).
- Provide for continuous surveillance (overcommitment of the counterreconnaissance force will weaken security).
- Use a combined arms approach to acquire and defeat enemy reconnaissance.
- Assign specific responsibilities for obstacle security.
- Develop a plan to withdraw forward security elements.

The counterreconnaissance force commander must plan enemy tracking and hand-off criteria (using sectors, TRPs, pre-planned targets) to gain and maintain contact with the enemy until he is destroyed, captured, blinded, or deceived (based upon the battalion TF commander's intent). The commander must also plan and disseminate engagement criteria, displacement criteria for all forces, and rehearse acquisition, engagement, and withdrawal procedures. Counterreconnaissance forces in the security zone consist of some or all of the elements listed in the following paragraphs.

Scouts. Scouts are finders, not killers. In counterreconnaissance operations they help locate and track enemy reconnaissance elements for destruction by light armor or infantry forces.

Light Armor and Infantry. Light armor conducts either a screen or guard while the infantry man OPs, establish ambushes, and conduct patrols. TOW and Dragon systems, AT-4s, and MK 19s can defeat thin-skinned enemy reconnaissance vehicles.

Ground Surveillance Radar. GSRs can help identify enemy reconnaissance units, especially during limited visibility. They monitor open terrain, high-speed avenues of approach, or defiles. The effectiveness of GSRs is improved by using overlapping sectors, the "flicker" on-off technique to avoid detection, and a well enforced sleep plan to ensure that GSR operators are alert. GSR positions are reconnoitered during daylight and occupied just before dark with a security force. Targets can be generally identified at 10 kilometers or less, and movement can be detected at much greater ranges. GSR NCOs are technical experts on the capabilities of their systems and should be included in the planning process.

Aviation. Observation and attack helicopters can greatly assist as part of a combined arms force in counterreconnaissance operations. OH-58Ds provide excellent day and night detection of enemy reconnaissance elements while AH-64s serve as the "killers." One employment method is the continuous attack technique. While one element is surveilling, the other two prepare to relieve the surveilling element as they remain in holding areas or the FARP. This technique allows continuous aviation support to the counterreconnaissance operation. In the planning phase, the airbattle captain provides input for specific missions, responsibilities, and reporting channels. The security plan should include contingencies in case aviation elements are unable to fly.

Field Artillery. Responsive FS is vital for a successful counterreconnaissance operation. Based on the IPB, the FSO should develop a flexible FS plan tailored to the commander's concept. He should ensure the plan is distributed to, and entirely understood by the counterreconnaissance commander. Indirect fire is required to the limit of the battalion's observation. A COLT team attached to the counterreconnaissance force can employ Copperhead FA munitions to selectively and surreptitiously destroy enemy reconnaissance vehicles with more precision, a requirement when indirect fires will impact near friendly

troops. In cases where FA is not readily available to the counterreconnaissance force, the mortar platoon deploys forward.

Engineers. Camouflaged, low-density nuisance minefield are highly effective in the counterreconnaissance fight. Such minefield maximize surprise, have minimum impact on MBA obstacle preparation, confuse the enemy, and provide early warning and identification of enemy approach. Off-road AT mines and dummy minefield may also be effective. Infantry must provide security for the engineers or emplace these obstacles if engineers are not available. Scouts can also emplace minefield, however it may impede their ability to provide continuous observation. Regardless of who emplaces them, all minefield should be overmatched and covered by direct and indirect fires.

ADA. Counterreconnaissance forces are especially vulnerable to enemy air attack. MANPADS and Avengers must be placed in positions to provide a complete protection for the entire force in the security zone.

Execution. There are four counterreconnaissance options in the defense:

- Place a company team forward in a screen or guard role with the scout platoon and other security zone assets attached. The company team commander directs the battle. The scouts acquire the targets and the company team destroys the enemy reconnaissance elements as they enter the EAs (see [Figure 6-17](#)).
- Place a light armor platoon OPCON to the scout platoon. The scout platoon leader directs the battle. Scouts acquire the targets while the light armor platoon destroys the enemy reconnaissance elements as they enter an EA.
- Designate a platoon or company team to provide a reaction force. The placement of the reaction force can either be in the MBA or in the security zone. The company team commander or scout platoon leader directs the battle. Scouts acquire the targets while the reaction force attacks to destroy the enemy reconnaissance.
- Require the scout platoon to destroy enemy reconnaissance elements. The scout platoon leader directs the battle. However, when scout elements become involved in a direct fire engagement, they quit observing their designated areas, and other enemy reconnaissance elements slip through.

Techniques may include—

- Tasking the scout platoon to conduct a zone reconnaissance to their designated OPs. They should assume enemy OPs are already in the zone.
- Tasking the infantry to conduct patrols and cover dismounted avenues. They can also help detect and destroy enemy OPs.
- Placing GSRs so friendly scouts and infantry patrols are not to their front, thus avoiding confusion by their movements.
- Deploying the scouts and OPs in depth—not on a line across the battalion front. They should have overlapping fields of observation so the forward OPs can visually hand over the advancing enemy reconnaissance to the next OP.
- Having a dedicated scout section observe each light armor platoon sector.
- Placing all elements in the security zone on the same radio net as the commander.
- Designating “no-movement areas” for specific times.
- Positioning selected CSS assets forward initially to reduce response time. Prestock as much as possible before moving into the security zone. Disseminate the location of the forward security area casualty collection point to everyone in that area and to these selected CSS assets.

Displacement of the Counterreconnaissance Force. Planning and executing the withdrawal of counterreconnaissance forces are critical. The withdrawal of the force should be planned as a rearward passage of lines under enemy pressure. Route recognition signals and timing for withdrawal must be coordinated and rehearsed between counterreconnaissance elements and company teams in the MBA. If possible, routes should go around friendly units rather than through them to avoid masking friendly fires. An effective displacement concealment technique is to fire linear indirect targets of HE/smoke forward of all friendly elements.

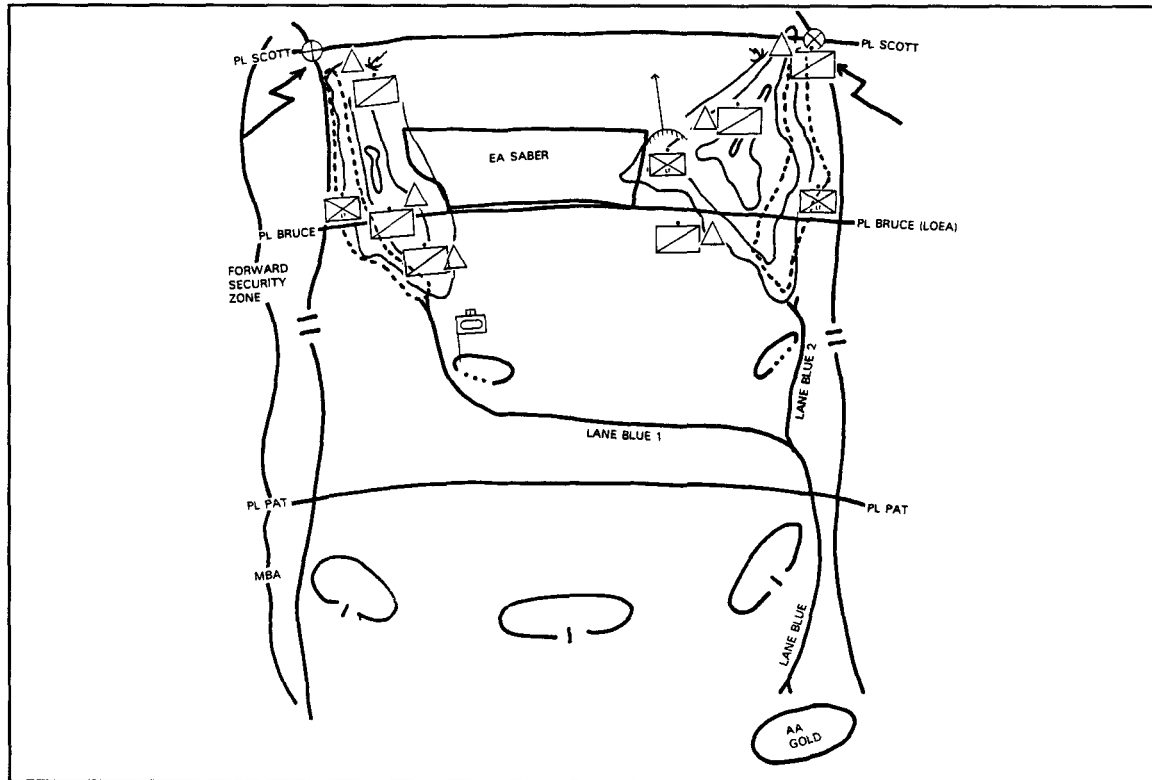


Figure 6-17. Example of a company/team conducting a forward screen with the scout platoon and other security zone assets attached.

PASSAGE OF LINES

Passage of lines is an operation in which one unit moves through another unit that is stationary and disposed in a tactical formation on a FEBA. It may also occur when an exploiting force moves through a force that conducted the initial attack. Light infantry forces may conduct a passage of lines to get behind the enemy, especially during infiltrations or raids. Movement in forward unit areas must be controlled, coordinated, and kept to a minimum. This avoids conflict with friendly troops. Light forces treat the positions of forward units as danger areas. They must be assumed to be under enemy surveillance in all weather or visibility. Detailed reconnaissance and coordination are crucial to ensure that the passage is conducted quickly and smoothly. This is especially true when units are operating in small elements, such as during infiltrations and exfiltrations.

Planning. The battalion is particularly vulnerable during a passage of lines. Personnel and units may be overly concentrated; fires of the stationary unit may be temporarily masked; and the passing unit may not be well disposed to react to enemy action.

Tentative Plan. The commander of the passing unit makes a tentative plan for the conduct of the overall operation. The plan includes the following:

- **Organization.** Unit and team integrity is maintained to provide better C2.
- **Order of movement.** An order of movement is prescribed based upon the number of passage points, degree of security required, enemy situation, terrain, and the formation the battalion will be traveling in after the passage. An order of movement reduces confusion and congestion by setting priorities on who moves and when.
- **Security.** The scout platoon can assist in the passage of lines by screening between the enemy and the battalion to provide early warning and limited protection. Noise, light, and radio discipline must be enforced.
- **C2.** The technique of C2 depends on the number of passage points. Ideally, multiple passage points are established, a tactic which favors decentralized control. The battalion commander must decide how he can influence the action and position himself accordingly. For example, if the battalion is conducting a passage of lines to attack forward of the FEBA, the commander will probably follow the lead unit.

Transfer of Responsibility. The time or circumstances when responsibility for the zone of action or sector of defense is transferred must be mutually agreed upon by the two commanders. The commander of an attacking battalion assumes responsibility for the zone of action when he has at least a company and a control element forward of the stationary unit. The responsibility for a sector changes from the commander of the disengaging unit to the commander on the defensive or delay position when the disengaging unit passes a specific location (a designated phase line, called the battle handover line) or at a specified time. Coordination and control are facilitated if the boundaries of the passing unit and the stationary unit coincide.

Control Measures. Control measures that can be incorporated into a passage of lines include the following:

- **Assembly areas.** These are areas in which a force prepares or regroups for further action. They are selected so as not to interfere with friendly forward positions.
- **Attack position.** This is the last position an attacking force may occupy before crossing the LD.
- **Passage lanes.** These are lanes along which a passing unit moves to avoid stationary units and obstacles. Planning should provide for primary and alternate lanes.
- **Passage point.** This is the point where units will pass through one another, either in an advance or a withdrawal. It is located where the commander desires subordinate units to physically execute a passage of lines.
- **Time of passage.** The specific time may be set by the commander ordering the passage.
- **Recognition signals.** These are used to send messages. Signals may consist of one or more letters, words, visual displays, characters, signal flags, or special sounds with prearranged meaning whereby individuals and units can be identified.

- **Contact point.** This is a point at which two or more units are required to make physical contact.
- **Release point.** This is a clearly defined control point on a route where specified units revert to the control of their respective commanders. Each of these elements continues its movement toward its own destination.
- **Route.** This is a line of travel from a specific point of origin to a specific destination.

Fire Support. FS planning is an essential element of a successful passage of lines. Direct and indirect fires of the stationary unit are normally integrated into the FS plan of the passing unit. Assets and control means may be collocated to provide coordinated and responsive support.

Reconnaissance. A thorough reconnaissance covers routes to, through, and beyond the area of passage. It should include existing troop locations and proposed positions. Care must be taken not to compromise unit intentions; therefore, it may be necessary to limit the number and size of reconnaissance parties. It may be better to use the vehicles or aircraft of the stationary unit.

Liaison. Liaison involves the exchange of information that is necessary for the conduct of the passage of lines. This includes the following:

- Designation of units to pass.
- Mission of units and scheme of maneuver.
- Fire support.
- Enemy situation.
- Friendly locations (for day and for night):
 - Contact and coordination points.
 - OPs and patrol routes.
 - PPs and lanes.
 - Obstacle locations and types.
 - AAs or attack position.
 - CS and CSS locations for emergency support.
 - Routes.
 - SOI information.

Conducting a Passage of Lines. Once the plan is formulated, the battalion commander will direct a thorough reconnaissance. If the passage of Lines is forward of friendly elements, the reconnaissance should include the route to the RP, the AA, and the passage lanes to the PPs. Normally, AAs will be occupied, at which time a reconnaissance by key leaders is made of the passage lane and PPs. The battalion commander may want to use the scouts to reconnoiter and screen forward of the passage points to provide early warning while the battalion conducts the passage of lines. Coordination is made with the stationary force. Recognition signals must be mutually agreed upon, and SOI information must be exchanged. Emergency signals must be agreed upon so that the passing and stationary units understand them.

Questions that should be asked and mutually answered include the following:

- Can the stationary unit provide guides?
- What FS is available?
- What CSS can be provided (such as litter teams)?
- What actions occur if enemy contact is made?

Once reconnaissance and coordination are completed, the battalion plan is finalized and disseminated to the lowest level. Just before the passage of lines occurs, a passing unit representative conducts last-minute coordination with stationary elements. This coordination should include—

- Confirmation of SOI and emergency signals.
- Any changes in friendly unit locations or obstacles.
- Any new enemy activity.
- The number of personnel and equipment to pass through the passage point.

At a prearranged time, movement toward passage lane begins. To increase speed and reduce vulnerability, multiple lanes are used consistent with the passing unit's scheme of maneuver, available routes, and needs of the stationary force. Marches are carefully calculated so that units arrive at passage lanes at the correct time, with few or no halts en route. At a location short of the PP, the recognition signal is identified, and a guide links up with the passing unit. The guide taking the passing unit through the PP leads it through friendly obstacles to an RP. The passing unit representative who conducted the last-minute coordination may position himself at the PP to identify vehicles and troops as they move through the PP. If necessary, challenges are made to ascertain whether units know the correct password. Command groups of both units may be collocated at a point from which they can observe critical areas, make timely decisions, and issue instructions to ensure the uninterrupted movement of subordinate units.

RELIEF IN PLACE

In a relief in place operation, one unit is replaced in combat by another unit. It may be accomplished during offensive or defensive operations, preferably during periods of limited visibility. A relief in place is conducted when a unit needs to reconstitute, rest, or decontaminate. Units that have a change of mission may also require relief.

The primary purpose for the relief is to maintain the combat effectiveness of committed elements. A relief in place may be conducted to—

- Replace a combat-ineffective force.
- Relieve a unit that has conducted prolonged operations.
- Replace a unit that requires medical treatment or decontamination as a result of exposure to nuclear, biological, or chemical munitions.

Relief in place requires extensive planning. Security, secrecy, and speed are critical. Incoming and outgoing commanders must coordinate—

- Exchange of liaison personnel down to company level.
- Positions of weapons.
- Exchange of sketch cards, range cards, and tactical and fire plans.

FM 17-18

- Relief of organic FS elements.
- Location and transfer of responsibility for obstacles.
- Guides and routes into and out of positions.
- Transfer of excess ammunition, wire lines, POL, and other materiel to the incoming unit.
- Communications.
- Joint reconnaissance of operational area.
- A deception plan.
- Routes for both units that facilitate speed of operation.
- Procedures for maintaining CS and CSS from the unit being relieved until line units have been relieved and the relieving units are prepared to support their operation.
- Enemy situation and intelligence.
- Sequence of relief.
- Time of change of responsibility for the area.

The tactical situation dictates whether the relief will be conducted during the day or at night. Before the relief operation, the incoming unit moves to a preplanned AA behind the unit to be relieved. The incoming command group sets up near the outgoing CP.

Units conduct the relief of forward positions using one of the following techniques:

- The relieving companies occupy hide positions and move into the primary positions after the relieved elements begin to withdraw to subsequent positions.
- The relieving companies occupy alternate positions as the relieved units withdraw from primary positions. This relief procedure is initiated when speed is desired.
- During periods of limited visibility, relieving companies move into primary positions before the relieved companies withdraw. Once primary positions have been occupied, the relieved units withdraw.

During the relief, both units are on the ongoing unit's radio net. The outgoing unit maintains its previous level of radio traffic. The incoming unit maintains listening silence. When relief is complete, the incoming unit switches to its assigned frequency.